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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,081

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Maarten De Leuw

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03/28/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

ROBINSON, ELIZABETH A

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

03/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,081	DE LEUW ET AL.	
	Examiner	Art Unit	
	Elizabeth Robinson	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6 and 9-26 is/are pending in the application.
- 4a) Of the above claim(s) 17-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6 and 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 4-6 and 9-26 are currently pending.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 21, 2008 has been entered.

Election/Restrictions

Newly submitted claims 17-26 are directed to an invention that lacks unity with the invention originally claimed for the following reasons:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1

Group I, claim(s) 1, 4-6 and 9-16, drawn to a luminaire.

Group II, claim(s) 17-26, drawn to a method of making a luminaire.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

All of the claims for Groups I and II claim the same technical feature, the luminaire of claim 1. However, the luminaire of claim 1 does not exhibit "special technical features" because it does not make a contribution over the prior art. Barnette (US 3,306,956) teaches a luminaire comprising a housing, with an illuminating bulb, that transmits light through a light transmitting plate. Coating layer 10 can be a separate layer that is comprised of a liquid resin (binder) and pigment particles, such as titanium dioxide and is located on an inner side of the housing, on the inside surface of the light transmitting plate. The coating makes the panel translucent and produces a diffused white light. As the structure of the coating is the same as in the instant application, titanium dioxide particles in a binder to provide a diffuse light, the coating should inherently also be reflective. The binders are taught in Column 20, line 22 through Column 21, line 2. These binders include acrylic acid esters, which would include methyl acrylate. This compound meets the limitation of the structural formula of claim 1 with R^1 , R^2 , and R^4 as H, and R^3 as COOCH_3 . Barnette does not specify the solvent, however, in the final form of the luminaire (product), the solvent has been removed. Thus, the choice of solvent would be a process step. The patentability of a product is independent of how it was made. Barnette (Column 11, lines 41-53) teaches that, in an application as a luminaire, it is desirable that the film is of a material that absorbs or screens ultraviolet light. Barnette (Column 8, line 48-60) teaches that a material that screens or absorbs ultraviolet light can be made by reacting the surface of the polymer film with benzoyl compounds and an isocyanate. Reacting the surface of an acrylate layer with an isocyanate results in crosslinking. Since the structure of the coating binder

can be the same as in the instant application, the temperature and absorption rate limitations are inherently met.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 17-26 are withdrawn from consideration as being directed to a nonelected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

Claims 1, 4-6 and 9-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, the limitation “the coating comprising a binder including at least 30% by weight of a polymer having the following structural formula” is not supported by the specification. The specification states a weight percentage of the substituent groups that are a part of the binder, but does not state a weight percentage for the polymer as a part of the binder. All other claims depend from claim 1 and thus, also fail the written description requirement.

Regarding claim 5, the specification for the instant application (Page 2, line 15 through Page 3, line 5) teaches that this reflectance value is for coatings with a silane binder, not the elected binder of claim 1. Thus, this limitation is not supported by the specification.

Claims 1, 4-6 and 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "resistance, reduced absorption rate and prevent discoloration" in claim 1 are relative terms which render the claim indefinite. The terms " resistance, reduced absorption rate and prevent discoloration " are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. There is no indication to how resistant to ultraviolet light or temperature the coating must be in order to meet the limitations of the claim. There is also no indication of what temperature range or type (high or low temperature) this limitation requires. There is no indication of how reduced an absorption rate is required to meet this limitation or what type of absorption (heat, light, etc.) is being claimed. There is no indication of what degree of discoloration prevention is required of the coating. All other claims depend from claim 1 and are thus also rendered indefinite.

Regarding claim 10, it is unclear what is meant by the phrase "of normally incident back light thereon" in the third line of claim 10. In particular, it is unclear what is meant by the modifier "back". The Examiner is interpreting this to mean that the coated plate transmits more than 60% of normally incident light from inside the luminaire through the plate to the outside.

Claim Rejections - 35 USC § 103

Claims 1, 6, 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnette (US 3,306,956).

Regarding claims 1, 6, and 9-12, Barnette (Column 11, lines 26-53 and Figures 9, 21 and 22) teaches a luminaire comprising a housing, with an illuminating bulb, that transmits light through a light transmitting plate. Coating layer 10 can be a separate layer that is comprised of a liquid resin (binder) and pigment particles, such as titanium dioxide and is located on an inner side of the housing, on the inside surface of the light transmitting plate. The coating makes the panel translucent and produces a diffused white light. As the structure of the coating is the same as in the instant application, titanium dioxide particles in a binder to provide a diffuse light, the coating should inherently also be reflective. The binders are taught in Column 20, line 22 through Column 21, line 2. These binders include acrylic acid esters, which would include methyl acrylate. This compound meets the limitation of the structural formula of claim 1 with R^1 , R^2 , and R^4 as H, and R^3 as COOCH_3 . Barnette does not specify the solvent, however, in the final form of the luminaire (product), the solvent has been removed. Thus, the choice of solvent would be a process step. The patentability of a product is independent of how it was made. Ex parte Jungfer 18 USPQ 1796, 1800 (BPAI 1991); Bristol-Myers Co. v. U.S. International Trade Commission 15 USPQ 2d 1258 (Fed. Cir. 1989). The burden is on applicants to show product differences in product by process claims. In re Thorpe 227 USPQ 964 (Fed. Cir. 1985); In re Best 195 USPQ 430 (CCPA 1977). Therefore applicant's composition would have been obvious to one

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of ordinary skill in the art based upon the prior art of Barnette, due to its final product structure. Barnette (Column 11, lines 26-41) teaches that the pigment is present in the resin in a quantity which makes the panels translucent. The amount of pigment added to the coating would be a result effective variable that would determine how translucent the panel is, or in other words, how much light the panel would transmit. It would be obvious to one of ordinary skill in the art to vary the amount of pigment and binder in the coating, in order to obtain a desired level of translucence or light transmission for the panel. Barnette (Column 11, lines 41-53) teaches that, in an application as a luminaire, it is desirable that the film is of a material that absorbs or screens ultraviolet light. Barnette (Column 8, line 48-60) teaches that a material that screens or absorbs ultraviolet light can be made by reacting the surface of the polymer film with benzoyl compounds and an isocyanate. Reacting the surface of an acrylate layer with an isocyanate results in crosslinking. Since the structure of the coating binder can be the same as in the instant application, the temperature and absorption rate limitations are inherently met.

Regarding claims 13 and 14, the pigment containing layer can also be considered an ultraviolet light blocking layer, since it incorporates titanium dioxide (TiO₂) particles within the coating.

Claims 4, 5, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnette, in view of Allen et al. (US 6,297,906).

Regarding claim 4, as stated above, Barnette teaches a luminaire that meets or can be obviously modified to meet the limitations of claim 1. The diffuse reflective coating is on the inside surface of the light transmitting plate, but not on the inner back surface of the housing. Allen (Column 30, lines 1-20) teaches diffuse reflective coatings used for luminaires. The diffuse reflective material can be used on both the diffusing plate and the reflecting element. Using the same material in both locations would simplify manufacturing, since only one coating material would be needed. It would be obvious to one of ordinary skill in the art to use the coating material of Barnette on both the diffusing plate and as the back reflective material, in the manner of Allen, in order to simply manufacture of a luminaire device.

Regarding claim 5, as the structure of the coating is the same as in the instant application, titanium dioxide particles in an acrylate binder, the coating should inherently have the same reflective properties as in the instant application.

Regarding claims 15 and 16, as stated above, Barnette teaches a luminaire that meets or can be obviously modified to meet the limitations of claim 1. Barnette does not explicitly teach the uses of the luminaire. Allen (Column 29, line 1 through Column 30, line 42) teaches that luminaires with diffuse coatings that obscure the light source from direct viewing are used for both lighting fixtures and backlights for LCD screens. It would be obvious to one of ordinary skill in the art to use the luminaire of Barnette, for the uses taught in Allen, in order to provide a diffuse light source in which the light source is not directly visible.

Response to Arguments

Applicant's arguments filed February 21, 2008 have been fully considered but they are not persuasive.

Regarding the 35 U.S.C. 112, first paragraph rejections, although claim 1 was modified, as stated above, it is still not supported by the specification.

Regarding the 35 U.S.C. 112, second paragraph rejection of claim 10, it is still unclear what is meant by the modifier "back" in this limitation. The meaning of the modifier "back" in this claim was not addressed in Applicant's response.

Due to modifications to claim 1 requiring the coating to be crosslinked, the rejections over the Sools et al. reference (US 2001/0040809) are withdrawn. Thus, the arguments with regards to this reference were considered, but are now moot.

Regarding Applicant's argument that the Barnette reference is only directed to decorative panels, as is clearly shown in Figure 9, the Barnette reference also teaches a luminaire. As stated above, since the cured coating composition of Barnette can be the same as in the instant application, the properties of the two coatings would inherently be the same.

Regarding Applicant's argument that the coating of Barnette is not reflective because it transmits light, the coating of the instant application transmits light (Claim 10) and is still reflective. These properties are not mutually exclusive.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Robinson whose telephone number is (571)272-7129. The examiner can normally be reached on Monday- Friday 8 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ear
/E. R./
Examiner, Art Unit 1794

/Carol Chaney/
Supervisory Patent Examiner, Art Unit 1794